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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,078	10/06/2003	Manhee Jo	243645US90	4061

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EXAMINER	
HAMZA, FARUK	
ART UNIT	**PAPER NUMBER**
2455	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	**Application No.** 10/678,078	**Applicant(s)** JO ET AL.	
	Examiner FARUK HAMZA	**Art Unit** 2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Amendment

1. This action is responsive to the amendment filed on November 19, 2008. Claims 17-23 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsukakoshi et al. (U.S. Patent Number 6,496,510) hereinafter referred as Tsukakoshi.

Tsukakoshi teaches the invention as claimed including a router device is provided with a plurality of router node devices interconnected via internal transmission lines, in which each of the plurality of router node devices comprises a unit for connecting to a plurality of networks (See abstract).

As to claim 17, Tsukakoshi teaches a routing control system comprising:

transfer devices that perform transfer control processing (Fig. 2, 15, forwarding unit), the transfer devices being connected to form a communication network (Fig. 2, 15, Column 6, lines 16-22) and a routing control device that is remotely located from the transfer devices (Fig. 2, 15, Column 6, lines 16-22) to which said transfer devices are connected, said routing control device does not have transfer control processing functionality performed by the transfer devices (See Fig. 2, Column 2, lines 3-14, Column 4, lines 1-Column 5, lines 28, Tsukakoshi discloses transfer devices (forwarding unit 15) are connected to routing control device),

wherein said routing control device has routing control information and transmits the routing control information to said transfer devices (See Fig. 4, Column 4, lines 1-15, Column 5, lines 35-Column 6, lines 22, Tsukakoshi routing control device has routing control information), and

said transfer devices perform said transfer control processing of packets and transmit the packets to respective transfer devices based on said routing control information transmitted from said routing control device (See abstract, Column 4, lines 1-15, Column 5, lines 35-Column 6, lines 22, Tsukakoshi discloses transfer devices (forwarding unit 15) perform processing of packets based on routing control information), and

wherein, in cases where said transfer devices do not have said routing control information, said transfer devices request transmission of said routing control information thereto from said routing control device (See Column 2, lines 35-51).

As to claim 18, Tsukakoshi teaches the routing control system according to claim 17, wherein when said routing control device receives a request for transmission of said routing control information from said transfer device, said routing control device transmits said routing control information, to the transfer device which requested this transmission (See Column 2, lines 35-51).

As to claim 19, Tsukakoshi teaches a routing control device to which transfer devices that perform transfer control processing are connected, comprising:

a routing processing unit configured to determine routing control information relating to packet transfer routes and transmit the routing control information to said transfer devices that are remotely located from the routing control device and are connected to form a communication network (See abstract, Column 2, lines 3-51, Column 3, lines 41-Column 6, lines 22), and

wherein when a request for transmission of said routing control information is received from said transfer device, said routing control device transmits said routing control information to the transfer device which requested this transmission (See abstract, Column 2, lines 35-51, Column 4, lines 1-15, Column 5, lines 35-Column 6, lines 22).

As to claim 20, Tsukakoshi teaches a transfer device that performs transfer control processing comprising:

a transfer unit configured to perform said transfer control processing of packets and transmit the packets over a communication network formed by the transfer device and a plurality of other transfer devices, based on routing control information transmitted from a routing control device that is remotely located from the transfer device and connected therewith, the transfer unit being configured to request transmission of said routing control information thereto from said routing control device, in case where the transfer device does not have said routing control information (See abstract, Column 2, lines 35-51, Column 4, lines 1-15, Column 5, lines 35-Column 6, lines 22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi as applied above, and further in view of Schwartz et al. (U.S. Patent Number 7,240,124) hereinafter referred as Schwartz.

Tsukakoshi teaches the invention substantially as claimed including a router device is provided with a plurality of router node devices interconnected via internal transmission lines, in which each of the plurality of router node devices comprises a unit for connecting to a plurality of networks (See abstract).

As to claim 21, Tsukakoshi teaches the routing control system according to claim 17.

Tsukakoshi does not explicitly teaches the claim limitation routing control device is configured to receive congestion condition information from each of the transfer devices, and to determine congestion conditions of physical links between the transfer devices based on the congestion condition information.

However, Schwartz teaches the claim limitation of routing control device (route optimizer) is configured to receive congestion condition information from each of the transfer devices (router), and to determine congestion conditions of physical links between the transfer devices based on the congestion condition information (abstract).

It would have been obvious to the ordinary skill in the art at the time of the invention to modify Tsukakoshi by adding functionality for router to receive congestion information, which would engineer traffic flows so as to avoid congestion and thereby improve network throughput. One would be motivated to do such to enhance system's performance.

Claim 22 do not teach or define any new limitation other than above claim 21. Therefore, claim 22 rejected for similar reasons.

As to claim 23, Tsukakoshi teaches the transfer device according to claim 20.

Tsukahoshi does not explicitly teach the claim limitation of transfer unit is configured to transmit congestion condition information to the routing control device.

However, Schwartz teaches the claim limitation of transfer unit (router) is configured to transmit congestion condition information to the routing control device (route optimizer) (abstract).

It would have been obvious to the ordinary skill in the art at the time of the invention to modify Tsukakoshi by adding functionality for configuring transfer unit to transmit congestion condition information to the routing control device, which would engineer traffic flows so as to avoid congestion and thereby improve network throughput. One would be motivated to do such to enhance system's performance.

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive.

In the remarks applicant argues in substance that; A) Tsukakoshi does not "transmits the routing control information to said transfer devices" (remarks page 6).

In response to A) The examiner respectfully disagree with the applicant. Tsukakoshi clearly teaches sending updated routing control information "routing information" to transfer devices "forwarding unit" (see Fig. 10, column 7, lines 25-30). Therefore, Tsukakoshi's teaching of sending routing information to forwarding unit meets the claimed lmitation.

B) Tsukakoshi does not teach "transfer devices request transmission of said routing control information thereto from said routing control device" (remarks page 7).

In response to B) The applicant is reminded that claim limitation must be given their reasonable broadest interpretation. Tsukakoshi teaches sending routing information to forwarding unit (see Fig. 10, column 7, lines 25-30). Forwarding units forward packets based received routing information. Forwarding unit can not forward packet without routing information. The forwarding unit do not generate routing information its own. The forwarding unit must get the routing information if don't have it. Tsukakoshi teaches collecting routing information. Collecting could be broadly interpreted to be requesting and then receiving. Therefore, teaching of Tsukakohi meets the claimed limitation.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is

571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

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